

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

August 21, 2012

Via E-Mail
Mr. Charles G. Nichols
Chief Financial Officer
Scio Diamond Technology Corporation
411 University Ridge, Suite D
Greenville, South Carolina 29601

Re: Scio Diamond Technology Corporation

Form 10-K for the Year Ended March 31, 2011

Filed June 21, 2011

Form 10-Q for the Quarter Ended December 31, 2011

Filed February 14, 2012 File No. 333-166786

Dear Mr. Nichols:

We have reviewed your response letter dated August 17, 2012 and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within 10 business days by confirming that you will revise your document in future filings (unless otherwise indicated and providing any requested information. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-Q for the Quarter Ended December 31, 2011 (as amended)

Explanatory Note, page 2

1. We note your disclosure that in September 2011, the Company delivered a letter to certain former ADI and ADGC stockholders stating that, in connection with the Company's acquisition of assets from ADI and ADGC, the Company would provide a right to buy Company common stock for \$0.01 per share to such stockholders (the "ADI Shareholder Purchase Rights" or "ADI subscription rights" and the "ADGC Shareholder Purchase Rights," respectively) that were accredited investors, provided certain information to the Company regarding their intentions to purchase such shares of Company common stock, and accepted payment from ADI or ADGC, as applicable, for the repurchase of such stockholders' shares in ADI and ADGC, respectively. Please

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clarify for us the nature and amount of any payments from ADI shareholders to the Company for these shares of common stock that occurred during the six months ended December 31, 2011. Also, please confirm to us that the 16 million rights issued in the ADI purchase are separate and accounted for separately from the amount of shareholder rights issued in the ADGC purchase in June 2012. It appears that as of December 31, 2011 you have only accounted for the stock purchase rights issued in connection with the ADI acquisition, please confirm and alternatively explain to us how you have accounted for the ADGC shareholder purchase rights at December 31, 2011.

Note 2. Asset Purchase, page 13

2. We note your disclosure that the purchase price allocation of the ADI asset includes \$943,685 of machinery and equipment, \$2,311,818 for reactors, and \$9,784,497 for in process R&D. Please explain to us and revise to disclose in the notes to the financial statements, how you determined the fair value of each of these asset categories. Your response and revised disclosure should include the nature of all significant assumptions used in the valuation. Also, since the amount of the in-process R&D has greatly increased since the original Form 10-Q, please explain to us why you believe that the total amount allocated to in-process R&D is appropriately classified as such.

Note 3. Intangible Assets, page 13

3. We note your disclosure that the useful life of the intangible assets is indefinite. Please explain to us and in Note 3 why you believe that it is appropriate to assign these intangible assets an indefinite useful life. In this regard, we note that you disclosed in your response to our prior comment two in your letter dated July 2, 2012 that these assets will be amortized as deferred fees over their respective economic lives once the product lines become available for sale. Additionally, you disclose in MD&A that at such time that production begins and commercialization of separate components of the intellectual property portfolio are then marketed to varying distribution channels, segmentation and bifurcation of the IPRD asset to finite-lived commercialized intellectual property assets will be considered. Please revise the notes to your financial statements to disclose your intended accounting for these intangible assets.

Note 6. Related Parties, page 14

4. We note your disclosure that both Mr. Adams, in an executive role, and Mr. Monahan previously served in various capacities with ADI through early 2011. Please tell us if the Company and ADI or ADGC should be considered entities under common control and therefore the related acquisitions should be accounted for under ASC 805-50-30-5. Your response should clearly explain the ownership of each of these entities at the time the related transactions occurred.

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Management's Discussion and Analysis

Critical Accounting Policies, page 17

Property, Plant & Equipment, page 18

5. We note your disclosure that regarding the useful life of the reactors, you plan to reassess the useful lives of these assets on an annual basis. As previously communicated, we believe that you should reassess the useful lives of the reactors at the time they are placed in service, rather than on an annual basis. Please revise your disclosure to clarify that you intend to comply with this accounting policy.

Form 10-K for the Year Ended March 31, 2012

Note 10. Subsequent Events

6. We note your disclosure that on June 5, 2012 you acquired substantially all of the assets of ADGC consisting of cultured diamond gemstone-related know-how, inventory, and various intellectual property, in exchange for \$100,000 in cash and the opportunity for certain current and former stockholders of ADGC that are accredited investors to acquire up to approximately 1 million shares of common stock of the Company for \$.01 per share. Please explain to us how you accounted for this acquisition of assets, including how you valued the stockholder rights issued in this transaction. Also, please tell us the nature of the assets acquired and the amount allocated to each major category of assets. As part of your response, please also tell us how you determined the fair value of the assets acquired and the useful life of each type of asset.

You may contact Claire Erlanger at (202) 551-3301 if you have questions regarding comments on the financial statements and related matters. You may also contact me at (202) 551-3813.

Sincerely,

/s/ Linda Cvrkel

Linda Cvrkel Branch Chief